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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,414

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Paul H. Dietz

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EXAMINER

ANTONIENKO, DEBRA L

ART UNIT

PAPER NUMBER

4194

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/644,414	DIETZ ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Debra Antonienko	4194	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>20 August 2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This action is in response to the application filed on August 20, 2003.
2. Claims 1-19 are currently pending.

### ***Priority***

3. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.

### ***Information Disclosure Statement***

4. The information disclosure statements (IDS) submitted on August 20, 2003 and December 3, 2004 are being considered by the examiner. Note that the foreign reference WO 98/22901 A (not translated) was not considered.

### ***Drawings***

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "101" and "210" in Figure 2 have both been used to designate "Sensor Data".
6. The drawings are objected to because objects in Figure 3 are not labeled or numbered.
7. Corrected drawing sheets in compliance with 37 CFR 1.121(d) or amendment to the specification to add the reference characters in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet

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should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 7 recites the limitation "the environmental data" in line 1. For purposes of examination, it is assumed that Claim 7 depends on Claim 6, as there is no mention of "the environmental data" in Claim 1. There is insufficient antecedent basis for this limitation in the claim.

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***Claim Rejections - 35 USC § 102***

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-7, 9, 10, 12-16, 19 are rejected under 35 U.S.C. 102(e) as being anticipated by Cohen-Solal et al., U.S. Patent Number 6,873,710 B1 (hereinafter referred to as Cohen-Solal).

**Examiner's Note:** The Examiner has pointed out particular references contained in the prior art of record within the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the entire reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Regarding Claim 1:

Cohen-Solal teaches a display system for enhancing a retail environment (Figure 1, item 100 and column 3, lines 11-30), comprising:  
a plurality of displays placed in a retail environment (column 1, lines 33-53 and column 3, lines 20-26);

a plurality of sensors placed in the retail environment, the sensors configured to acquire implicit characteristics of consumers (Figure 1, items 120-1 and 120-N, and column 2, lines 12-20);

a database storing content and implicit preference models (Figure 1, item 400 and column 2, lines 24-27); and  
means for updating the displays with the content in real-time according to the implicit characteristics of the consumers and the implicit preference models (Figure 1, item 300 and column 3, lines 62-65).

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Regarding Claim 2:

Cohen-Solel teaches the retail system of claim 1, in which components of the displays are selected from the group consisting of projectors, audio outputs, signages, controllable mannequins, models, scent generators, and combinations thereof (column 10, lines 10-16).

Regarding Claim 3:

Cohen-Solel teaches the retail system of claim 1, in which the sensors are selected from the group consisting of proximity sensors, infrared sensors, microphones, thermal sensors, cameras, touch sensors, and motion sensors (column 3, lines 27-30).

Regarding Claim 4:

Cohen-Solel teaches the retail system of claim 1, further comprising:

determining consumer behavior in a vicinity of the displays (column 4, lines 62-67); and

means for updating the displays with the content in real-time according to the consumer behavior (column 1, lines 54-60).

Regarding Claim 5:

Cohen-Solel teaches the retail system of claim 1, in which the implicit consumer characteristics are selected from the group consisting of gender, height, weight, age, and race (column 3, lines 56-57).

Regarding Claim 6:

Cohen-Solel teaches the retail system of claim 1, in which the sensors acquire environmental data from the retail environment (column 4, lines 6-11).

Regarding Claim 7:

Cohen-Solel teaches the retail system of claim 1, in which the environmental data are selected from the group consisting of weather, traffic, time, date, pricing, and sales (column 4, lines 6-11).

Regarding Claim 9:

Cohen-Solel teaches the retail system of claim 1, in which the updating precludes an explicit identification of the consumers (column 2, lines 12-15).

Regarding Claim 10:

Cohen-Solel teaches the retail system of claim 1, in which the updating is based on sensed shopping patterns of the consumers (column 4, lines 62-67).

Regarding Claim 12:

Cohen-Solel teaches the retail system of claim 1, in which particular sensors are embedded in the retail environment (Figure 1, items 120-1 and 120-N, and column 2, lines 12-20).

Regarding Claim 13:

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Cohen-Solel teaches the retail system of claim 1, in which the content includes audio and video signals (column 10, lines 10-16).

Regarding Claim 14:

Cohen-Solel teaches the retail system of claim 1, in which the content is displayed according to a history of interactions between the consumers and the retail environment (column 4, lines 62-67).

Regarding Claim 15:

Cohen-Solel teaches the retail system of claim 1, in which the content includes product information (column 5, lines 33-35).

Regarding Claim 16:

Cohen-Solel teaches the retail system of claim 1, in which the content modifies an appearance of the retail environment (column 3, line 60 through column 4, line 5).

Changing display content, i.e. choosing one over the other is equivalent to modifying an appearance of the retail environment.

Regarding Claim 19:

A method for enhancing a retail environment, comprising:  
placing a plurality of displays in a retail environment;

placing a plurality of sensors in the retail environment, the sensors configured to acquire implicit characteristics of consumers;

storing content and implicit preference models in a database; and

updating the displays with the content in real-time according to the implicit characteristics of the consumers and the implicit preference models.

It is a method form of Claim 1 and is rejected in a like manner.

### ***Claim Rejections - 35 USC § 103***

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for  
all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Baker, U.S. Patent Number 7,224,382 B2 (hereinafter referred to as Baker).

Regarding Claim 8:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which the retail environment includes three-dimensional structural elements, and further comprising: means for projecting images on the three-dimensional structural elements.

However, Baker discloses in which the retail environment includes three-dimensional structural elements, and further comprising: means for projecting images on the three-dimensional structural elements (column 3, line 33; column 24, lines 51-64; and the Abstract).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Baker's three-dimensional capabilities into Cohen-Solel's method and apparatus for presenting information in order to present a wider variety of content for marketing.

Regarding Claim 18:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which a particular display simulates multiple video monitors with a single projector.

However, Baker discloses in which a particular display simulates multiple video monitors with a single projector (column 3, line 33 and column 14, lines 24-32).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Baker's multiple images in order to maximize the marketing efforts.

14. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Marcus, U.S. Patent Application Publication US 2002/0077902 A1 (hereinafter referred to as Marcus).

Regarding Claim 11:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not explicitly disclose in which the sensors acquire heart rates and breathing rates of the consumers.

However, Marcus discloses in which the sensors acquire heart rates and breathing rates of the consumers (page 11, [0164]-[0167]. Marcus suggests monitoring breathing rate

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based on the physiological relationship between heart and breathing rates, as in a polygraph.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Marcus' biometric data gathering in order to further determine consumer activity and response to marketing.

15. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen-Solel in view of Hannigan et al., U.S. Patent Number 5,902,032 (hereinafter referred to as Hannigan).

Regarding Claim 17:

As described above, Cohen-Solel teaches the limitations of the retail system of claim 1, but Cohen-Solel does not disclose in which a particular display simulates theatrical lighting.

However, Hannigan discloses in which a particular display simulates theatrical lighting (column 1, lines 5-15 and column 3, lines 30-40).

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Hannigan's lighting techniques in order to maximize the marketing displays.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBRA ANTONIENKO whose telephone number is (571)270-3601. The examiner can normally be reached on Monday through Friday, 6:30 AM to 4:00 PM EST, ALT Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Kyle can be reached on 571-272-6746. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Debra Antonienko  
Patent Examiner

/Charles Kyle/  
Supervisory Patent Examiner, Art Unit 4194